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ABSTRACT

Designed to consider whether pictures might facilitate word identification and word learning and to determine the most appropriate design of pictures to aid in independent reading, this instrument consists of 24 sentences and accompanying pictures that completely or partially represent the noun information in the sentence. Substitutions for the target words are categorized according to their degree of "graphic proximity" (degree of graphemic similarity between observed and correct responses) and contextual congruency. (This document is one of those reviewed in The Research Instruments Project (TRIP) monograph "Measures for Research and Evaluation in the English Language Arts, Volume 2," published by the Committee on Research of the National Council of Teachers of English in cooperation with the ERIC Clearinghouse on Reading and Communication Skills. The TRIP review, included here as an introduction to the instrument, describes the instrument's category (reading), title, author, date, age range (primary), purpose, and physical characteristics.) (HTH)

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The Interaction of Picture and Print in Rading Instruction.

The measurement instruments contained in this document have been reviewed in a monograph (cited below) edited by William T. Fagan, Charles Cooper, and Julie Jensen, for The Research Instruments Project (TRIP), and funded by a grant from the Trustees of the NCTE Research Foundation:

Measures for Research and Evaluation
in the
English Language Arts
Volume II

The purpose of the editors has been to select and review measurement instruments pertaining to all aspects of research and evaluation in the English language arts, e.g. language and language development, literacy, literature, reading (including comprehension, teacher-pupil interaction, etc.), writing, and teacher knowledge and attitudes. In order to make some of the actual instruments reviewed more readily available, the ERIC Clearinghouse on Reading and Communication Skills (ERIC/RCS) has cooperated with the editors by processing selected instruments into the ERIC system (see the 42 documents assigned Clearinghouse accession numbers CS 207 904-945).

CS 207937

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Category: Reading

Title: The Interaction of Picture and Print in Reading Instruction

Author: Susan Dalfen Denburg

Age Range: Primary

Description of the Instrument:

Purpose: To consider whether pictures might facilitate word identification and word learning and to determine the most appropriate design of pictures to aid in independent reading.

Date of Construction: 1975

Physical Description: Pictures have been criticized for attracting attention away from the text and for presenting ambiguous and/or misleading information; they are also praised for arousing a child's attention and for motivating him to read. However, the role of pictures in reading has rarely been delineated nor have pictures been designed to optimize that role. To fulfill this need, this instrument consisted of twenty-four sentences and accompanying pictures which completely or partially represented the noun information of the sentence.

The sentences were pasted onto the bottom of an 8½" x 10" piece of white bristol board and a glossy photograph of the matching picture (approximately 5" x 6"), was pasted onto the top half of the page. A test booklet consisted of 24 such pages - six with sentence alone, six with sentence plus a full picture, six with sentence plus a partial picture (object noun deleted), and six with sentence plus a partial picture (subject noun deleted).

The general directions were:

Here is a book that we're going to read. On every page you'll see a short sentence that tells a little story. Sometimes there will be a picture that goes with the words in the sentence and sometimes the sentence will be all alone on the page. I want you to look at the words in the sentence carefully and after you read them to yourself, read them to me out loud. Many of the words will be hard for you to read, but I want you to try your best to read them to me.

If there is a picture on the page, use it to help you figure out the words in the sentence. Sometimes the picture will go with all the words in the sentence and sometimes the picture will have a missing part and show you only part of the sentence. You should use the picture to help you with the words but remember that I want you to read me the words in the sentence, so always look at the sentence when you read.

The description of an example is as follows: For the sentence "The donkey pulls the wagon," the full picture portrays a donkey at a slight angle with a wagon attached to his sides and trailing behind him. Deleting the donkey leaves the wagon attached to something (obviously missing) and deleting the wagon leaves a donkey with some sticks attached to his sides and pointing behind him.

Substitutions for the target words (pictured) were categorized according to their degree of "graphic proximity" (Goodman and Burke, 1973) and contextual congruency. Graphic proximity refers to the degree of graphemic similarity between observed and exported (correct) response.

Validity, Reliability, and Normative Data:

The identification of a word during fluent reading as a construct was considered to result from an interplay of information from various sources including graphemic information available in the printed word and contextual information which encompasses knowledge of syntactic and semantic constraints of the language. Further, a trade-off is postulated between visual and non-visual information so that the more of the latter that the reader can contribute, the less of the former he needs sample in order to identify a word correctly. This trade-off is seen as partial rather than complete since information from the various sources is pieced together or integrated and works cooperatively in word identification.

Within the framework of this construct, a number of principles guided the construction of the instrument:

1. The combination of picture and text should provide a "communication package" which surpasses the interest of communication potential of either alone.

2. The word cued by the picture should not be so predictable that it obviates the need to examine the printed word.

3. Conversely, the relationship must not be so unpredictable as to be bizarre.

4. The words pictured must be in the child's listening or spoken vocabulary.

5. The sentences used should be based on the degree of syntactic awareness that first graders have been shown to possess.

Sentence patterns chosen for the instrument were based on data obtained by Menyuk (1963) whilst words chosen were those likely to be part of the vocabulary of first graders according to the Thorndike and Lorge (1944) word count and the Rinsland (1945) oral vocabulary list. The final selection of words and pictures was determined through pilot studies, and the judgments of a sample of adults.

The interrater reliability of two adults for the graphic proximity scores was 0.99.

Data from 48 first graders indicate that the presence of a picture has a strong facilitative effect on word identification in content and a smaller though significant facilitative effect on word learning, as measured by a follow-up word list task. The availability of pictorial information seems to provide

the children with an opportunity to use whatever limited graphemic skill they possess and to integrate graphemic with contextual information in a manner reminiscent of the skilled reader. (Refer to abstracted report in RRQ for particular data regarding degree of readers' graphemic knowledge and optimal amount of pictorial information to achieve manimal gains).

Related Documents:

Denburg, Susan Dalten. The interaction of picture and print in reading instruction (abstracted report). Reading Research Quarterly, 1976-77, 12(2), 176-189. (EJ 153 486)

Denburg, Susan M. The interaction of picture and print in reading instruction. Unpublished doctoral dissertation, University of Toronto, 1975.

Goodman, K. S. and Burke, C. L. Appendix for theoretically based studies of patterns of miscues in oral reading performance. Final Report. Office of Education, HEW, April, 1973.

Menyuk, P. Syntactic structures in the language of children. Child Development, 1963, 34, 407-422.

Rinsland, H. D. Basic Vocabulary of Elementary School Children. New York: The MacMillan Co., 1945.

Thorndike, E. L. and Lorge, I. The Teacher's Wordbook of 30,000 Words. New York: Teacher's College, Columbia University, 1944.

APPENDIX A

INSTRUCTIONS

INSTRUCTIONS

Here is a book that we're going to read. On every page you'll see a short sentence that tells a little story. Sometimes there will be a picture that goes with the words in the sentence and sometimes the sentence will be all alone on the page. I want you to look at the words in the sentence carefully and after you read them to yourself, read them to me out loud. Many of the words will be hard for you to read, but I want you to try your best to read them to me.

If there is a picture on the page, use it to help you figure out the words in the sentence. Sometimes the picture will go with all the words in the sentence and sometimes the picture will have a missing part and show you only part of the sentence. You should use the picture to help you with the words but remember that I want you to read me the words in the sentence, so always look at the sentence when you read.

Let's try a few sentences. Here's one (Show a card with no picture on it). Can you read it to me? (Wait a few moments and then read along with the child, pointing out the articles and the verb). Let's try another sentence. (Show card with full picture). Look, this one has a picture to go with it. Can you use the picture to help you with the hard words? (Point out the correspondences between the printed nouns and verb and their pictorial counterparts).

Let's try one or two more. (Show card with partial picture with actor deleted). Try to read the sentence (Give help with verb, if necessary). Does the picture help you? Which part of the sentence can you

see in the picture? Does the picture look funny? Is something missing? Let's try to read the sentence together. (Help the child, pointing out which words can and cannot be found in the picture). Very good. Just one more practice. (Repeat with partial picture having object noun deleted).

Good. I think we can start reading the book now. Open it up and try to read the sentence on the first page. Remember to use the picture to help you and to look carefully at the words when you read to me.

(Have the child turn the pages by himself and help him identify the verb whenever necessary.)

Just before you go back to class, I'm going to show you a bunch of little cards. Each card has one word written on it. I'll show you one card at a time and I want you to read me the word that's written on it. Don't worry if the words are hard. I just want you to try your best to read them to me.

APPENDIX B

SENTENCES AND PICTURES

The fireman pulls the hose.

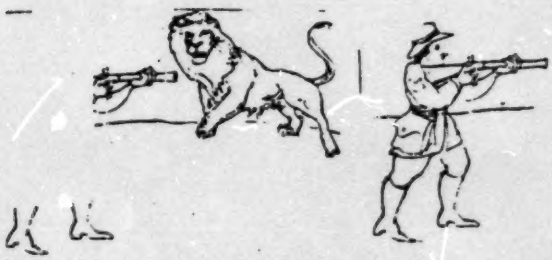
The fireman pulls the hose.

The fireman pulls the hose.

The barber cuts the beard.

The barber cuts the beard.

The barber cuts the beard.



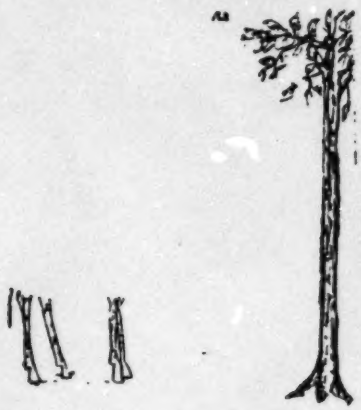
the hunter shoots the lion

the hunter shoots the lion

The sailor holds the flag.

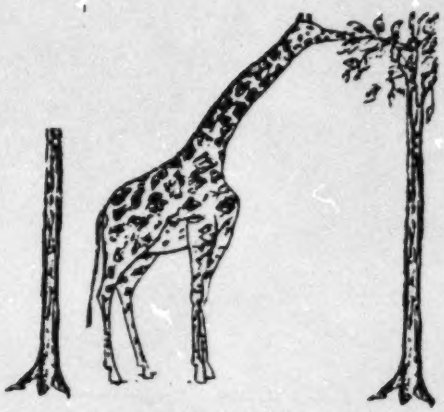
The sailor holds the flag.

The sailor holds the flag.

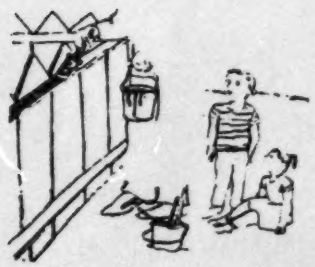


The giraffe eats the leaves.

The giraffe eats the leaves.

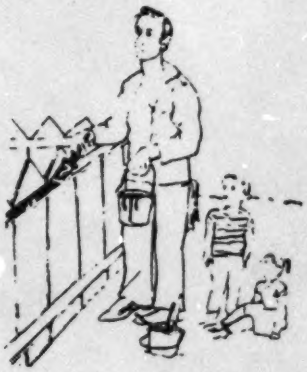


The giraffe eats the leaves.



The father paints the fence.

The father paints the fence.



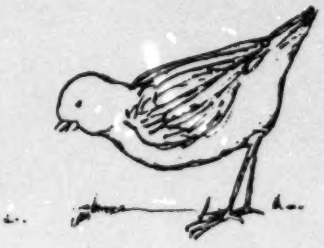
The father paints the fence.

The cowboy rides the pony.

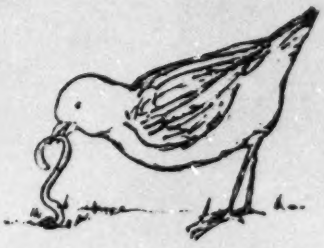
The cowboy rides the pony.

The cowboy rides the pony.

The bird eats the worm.



The bird eats the worm.

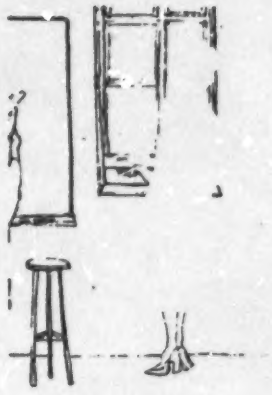


The bird eats the worm.

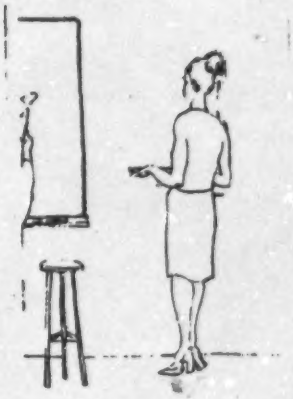
The child holds the umbrella.

The child holds the umbrella.

The child holds the umbrella.



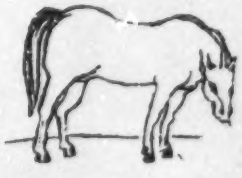
The teacher opens the window.



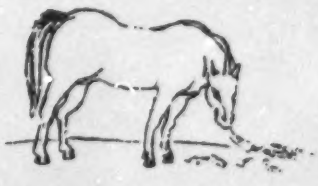
The teacher opens the window.

The teacher opens the window.

the horse eats the carrot



the horse eats the carrot



the horse eats the carrot

The baker makes the bread.

The baker makes the bread.

The baker makes the bread.

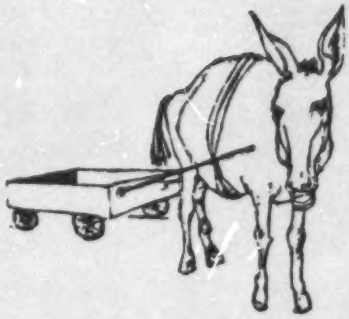
The policeman stops the truck.

The policeman stops the truck.

The policeman stops the truck.

The donkey pulls the wagon.

The donkey pulls the wagon.



The donkey pulls the wagon.

The nurse rocks the cradle.

The nurse rocks the cradle.

The nurse rocks the cradle.

The woman washes the plate.

The woman washes the plate.

The woman washes the plate.

The puppy licks the shoe.

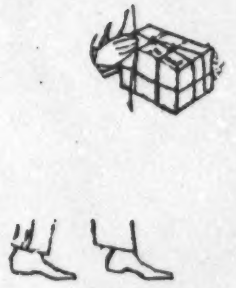
The puppy licks the shoe.

The puppy licks the shoe.

The farmer chops the wood.

The farmer chops the wood.

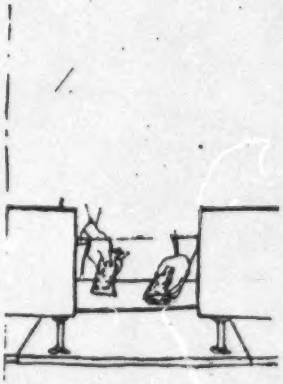
The farmer chops the wood.



The postman holds the package.

The postman holds the package.

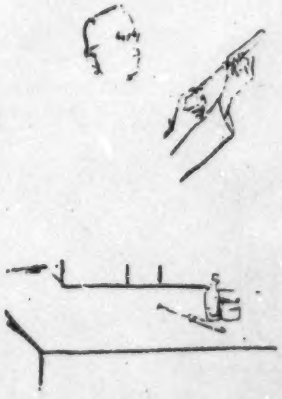
The postman holds the package.



The lady counts the dollars.

The lady counts the dollars.

The lady counts the dollars.



The doctor holds the needle.

The doctor holds the needle.

The doctor holds the needle.

The clown rides the bicycle.

The clown rides the bicycle.

The clown rides the bicycle.

the rabbit chases the skunk

the rabbit chases the skunk

the rabbit chases the skunk

The witch carries the basket.

The witch carries the basket.

The witch carries the basket.